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7

*Via Electronic Mail
(Hardcopy to Follow)*

BEFORE THE STATE WATER RESOURCES CONTROL BOARD

11 **In the Matter of Waste Discharge
Requirements for City of Stockton,
12 Stockton Regional Wastewater Treatment
Control Facility, San Joaquin County,
13 California Regional Water Quality
Control Board – Central Valley Region,
14 Order No. R5-2008-0154; NPDES No.
CA0079138**

SWRCB/OCC NO. _____

PETITION FOR REVIEW

18 Pursuant to Water Code section 13320 and Title 23 of the California Code of Regulations
19 section 2050, Petitioners San Luis & Delta-Mendota Water Authority ("Authority"), on behalf of its
20 member agencies, and Westlands Water District ("Westlands") (collectively, "Petitioners")
21 respectfully petition the State Water Resources Control Board ("State Water Board") to review and
22 vacate Order No. R5-2008-0154 ("Order"), adopted by the California Regional Water Quality
23 Control Board, Central Valley Region ("Regional Board"), on October 23, 2008.

24 The Order establishes discharge requirements for the City of Stockton's ("City") Regional
25 Wastewater Control Facility ("RWCF"), which treats domestic and industrial wastewaters from the
26 City's sewage customers in the City, the Port of Stockton, and surrounding urbanized San Joaquin
27 County areas before it is discharged through a single outfall into the Sacramento-San Joaquin Delta
28 ("Delta") approximately 1.5 miles upstream of the Stockton Deep Water Ship Channel. As the

1 discharge at issue is into surface waters that are jurisdictional waters of the United States, the
2 discharge is subject to the Federal Water Pollution Control Act, 33 U.S.C. § 1251 *et seq.* ("Clean
3 Water Act"), and the Clean Water Act's National Pollutant Discharge Elimination System
4 ("NPDES") permit program. Accordingly, the adopted Order and the waste discharge requirements
5 serve as a NPDES permit (NPDES No. CA0079138).

6 Prior to the Regional Board's adoption of the Order, Petitioners expressed concern to the
7 Regional Board – in timely written comments and through subsequent examination of witnesses and
8 oral comments made at the hearing on the Order – that the discharge requirements are inconsistent
9 with applicable water quality standards and objectives, and do not adequately protect the beneficial
10 uses of the waters receiving the City's discharges. Despite these concerns and similar ones raised
11 by other interested persons, the Regional Board adopted the Order.

12 **I. NAME AND ADDRESS OF PETITIONERS**

13 San Luis & Delta-Mendota Water Authority
14 P.O. Box 2157
15 Los Banos, California 93635
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18 Westlands Water District
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1 **2. THE SPECIFIC ACTION OR INACTION OF THE REGIONAL BOARD**
2 **WHICH THE STATE WATER BOARD IS REQUESTED TO REVIEW AND**
3 **A COPY OF ANY ORDER OR RESOLUTION OF THE REGIONAL BOARD**
4 **WHICH IS REFERRED TO IN THIS PETITION**

5 Petitioners seek review of the Order, a copy of which is attached hereto as **Exhibit A**. The
6 full title of the Order is "Order No. R5-2008-0154, NPDES Permit No. CA0079138, 'Waste
7 Discharge Requirements for the City of Stockton Regional Wastewater Control Facility San Joaquin
8 County.'"

9 **3. THE DATE ON WHICH THE REGIONAL BOARD ACTED OR REFUSED**
10 **TO ACT OR ON WHICH THE REGIONAL BOARD WAS REQUESTED TO**
11 **ACT**

12 The Regional Board adopted the Order on October 23, 2008.

13 **4. A FULL AND COMPLETE STATEMENT OF THE REASONS THE**
14 **ACTION OR FAILURE TO ACT WAS INAPPROPRIATE OR IMPROPER**

15 Before the September 22, 2008, deadline to do so, Petitioners, as well as other interested
16 persons and entities, submitted detailed comments on discharge requirements proposed in a draft
17 order. (Petitioners' September 22, 2008, comment letter and October 9, 2008, letter requesting
18 designated party status are attached hereto without exhibits, as **Exhibits B and C**.) Those collective
19 comments, which are incorporated into this petition by this reference, drew the Regional Board's
20 attention in part to the fact that the proposed discharge requirements failed to comport with statutory
21 and regulatory requirements because they were inconsistent with applicable water quality standards
22 and objectives and did not adequately protect the beneficial uses of the waters receiving the City's
23 discharges. Petitioners further highlighted the shortcomings of the proposed discharge requirements
24 through oral comments and the examination of witnesses during an October 23, 2008, hearing. The
25 Regional Board adopted the Order without addressing many of the concerns raised.

26 As a result, the Order is improper for the following reasons:

27 **a. The Order Fails to Comply with the Water Quality Objectives**
28 **Established in the Bay-Delta Plan and the Basin Plan**

 The discharge requirements imposed through the Order are inconsistent with water quality
 objectives established in the Water Quality Control Plan for the San Francisco Bay/Sacramento-San

1 Joaquin Delta Estuary ("Bay-Delta Plan") and the Water Quality Control Plan, Fourth Edition, for
2 the Sacramento and San Joaquin River Basins ("Basin Plan").¹ Petitioners' comments to the
3 Regional Board urged the implementation of discharge requirements that harmonized with the water
4 quality objectives from the Bay-Delta Plan and Basin Plan.

5 As just one example of the inconsistencies, Petitioners highlight how salinity concentration
6 is treated in the Order. The Bay-Delta Plan and Basin Plan establish salinity objectives of 700
7 µmhos/cm from April through August, and 1,000 µmhos/cm from September through March: (1) in
8 the San Joaquin River at Brandt Bridge, (2) in Old River near Middle River, and (3) in Old River at
9 Tracy Road Bridge. The Order recognizes that the City's discharge "may cause or contribute to an
10 exceedance of a water quality objective for salinity" (Order No. R5-2008-0154, Attachment F,
11 VII.B.3.c.) Nevertheless, the Order allows the City to discharge effluent with salinity concentration
12 of 1,300 µmhos (annual average), provided the City implements a plan to achieve a salinity
13 reduction goal stated in the Order. Only if the City fails to implement a salinity reduction plan must
14 the City comply with the Bay-Delta Plan and Basin Plan's salinity objectives. In other words, the
15 Regional Board treats the Bay-Delta Plan and Basin Plan's salinity objectives as penalties for
16 noncompliance. Furthermore, whereas compliance with the salinity objectives under the Bay-Delta
17 Plan and the Basin Plan are based on a 30-day running average, compliance under the Order is
18 based on an annual average. And whereas monitoring of salinity under the Bay-Delta Plan and
19 Basin Plan occurs continuously, monitoring under the Order occurs weekly. In all, these deviations
20 ensure that the City's discharges will never help achieve Delta salinity objectives.

21 The too-liberal nature of these discharge requirements is troubling in its own right, but the
22 Regional Board's justification for them is equally unsettling. Looking again to the Order's handling
23 of salinity discharge requirements, the Regional Board contends the State Water Board intended for
24 "permit limitations to play a limited role...in achieving compliance with the EC water quality
25 objectives." (Order No. R5-2008-0154, Attachment F, IV.C.3.y.v.) The assertion is incorrect
26 because it directly contravenes in particular the Bay-Delta Plan's mandates that the Regional Board

27
28 ¹ Certain documents referenced herein, such as the Bay-Delta Plan, are readily available and on that basis are not
attached as exhibits. (See 23 Cal.Code.Regs § 648.3 [records deemed evidence by reference].)

1 take a chief role in implementing water quality objectives through the discharge permits it
2 administers. Indeed, the State Water Board amended the implementation program in the Bay-Delta
3 Plan in 2006 to clarify the Regional Board's mandatory duty in administering permits:

4 Central Valley Regional Water Board shall impose discharge controls on in-Delta
5 discharges of salts by agricultural, domestic, and municipal dischargers.

6 (2006 Bay Delta Plan at IV.B.1.ii.) The Bay-Delta Plan went on to state that the implementation of
7 salinity objectives should be accomplished through "pollutant discharge controls." (*Id.* at IV.B.)
8 Thus, the Regional Board should have but failed to help achieve the salinity objectives by imposing
9 discharge controls in the permits it issues.

10 On this point, it is worth noting that the concern about inconsistencies between the Order
11 and the Bay-Delta Plan and Basin Plan was corroborated by a recent filing with the State Water
12 Board on behalf of the City. The Central Valley Clean Water Association ("CVCWA") – of which
13 the City is a member – is an association whose mission is to "effectively represent the interests of
14 wastewater agencies in the Central Valley in regulatory matters." (Central Valley Clean Water
15 Association Strategic Plan, June 19, 2008, available at <http://www.cvcwa.org/bp.htm>, as of
16 November 24, 2008; <http://www.cvcwa.org/memagencies.htm>, available as of November 24,
17 2008.) In a September 30, 2008, letter to the State Water Board, the CVCWA recognized that the
18 Regional Board is expected to implement water quality objectives through the discharge permits it
19 administers. (See **Exhibit D**, September 30, 2008, letter by CVCWA.) Specifically, CVCWA
20 made the following comment:

21 In 2006, the State Water Board amended the Bay-Delta Plan . . . implementation
22 program to require the Central Valley Regional Water Board to 'impose discharge
23 controls on in-Delta discharges of salts by agricultural, domestic, and municipal
24 dischargers. (2006 Bay-Delta Plan at pp. 10, 28.)

(*Ibid.*)

25 Thus, the CVCWA recognized, discharge requirements like those in the Order must be
26 consistent with water quality objectives stated in the Bay-Delta Plan and Basin Plan. Furthermore,
27 as the CVCWA acknowledged, the Regional Board is expected to "impose discharge controls" –
28 e.g., discharge requirements in Orders like the one – that advance those objectives.

1 By adopting the Order it did, however, the Regional Board ignored its mandate from the
2 State Water Board. The Order's failure to implement and effectuate water quality objectives stated
3 in the Bay-Delta Plan and Basin Plan renders it unlawful. For these reasons, the Order should be
4 vacated or remanded to the Regional Board with instruction to ensure that all its discharge
5 requirements are consistent with the Bay-Delta Plan and the Basin Plan.

6 **b. The Order Maintains Discharge Requirements Previously Ordered By**
7 **The Regional Board Without Considering New Scientific Information**
8 **About the Declining Health of the Delta.**

9 The Order may not go far enough to adequately ensure protection of the beneficial uses of the
10 water receiving the City's discharges. The Order's potential shortcomings in this regard are
11 underscored by the fact that the Regional Board carried over discharge requirements from the City's
12 prior order without substantial justification or in disregard of emerging scientific information
13 warranting heightened scrutiny of what the Order allows.

14 One example of this defect is the Order's discharge requirements regarding ammonia. At the
15 October 23, 2008, hearing, the Regional Board defended the ammonia limits in the Order as
16 reflective of U.S. EPA recommendations. For its part, the Order concludes that the ammonia
17 allowed in the City's effluent discharge sufficiently protects the beneficial uses of the waters
18 receiving the City's discharges based on an analysis of the maximum and average concentrations of
19 ammonia in effluent and receiving water. (Order No. R5-2008-0154, Attachment F, IV.C.3.y.v.)
20 Therefore, the ammonia levels allowed in discharges under the Order were carried over from the
21 previous order applicable to the discharge.

22 However, the carryover appears to ignore two important realities. First, the Strategic
23 Workplan for Activities in the San Francisco Bay/Sacramento-San Joaquin Delta Estuary
24 ("Strategic Workplan"), along with several other new studies, acknowledge new evidence
25 concerning ammonia. In the Strategic Workplan, the State Water Board and Regional Board wrote:

26 Studies suggest that delta smelt may be particularly sensitive to ammonia and that
27 ammonia may limit primary productivity in the Delta Ammonia, specifically
28 the unionized form, is toxic to fish, with salmonid species being most sensitive. In
addition, algae growth is inhibited when nitrogen is in the form of ammonia rather

1 than nitrate. Major sources of ammonia loading to the lower Sacramento River
2 include agricultural discharges and waste-water treatment plant discharges.

3 (Strategic Workplan for Activities in the San Francisco Bay/Sacramento-San Joaquin Delta Estuary,
4 p. 54.) The Regional Board's concern with ammonia in the Delta has also been the subject of two,
5 recent summary papers, attached hereto as **Exhibit E**. However, emerging scientific information
6 was dismissed by the Regional Board as failing to rise to the level of "defensible scientific
7 information." The Regional Board does not explain what is "defensible scientific information" nor
8 is it apparent that the Regional Board uses standard to support all other waste discharge
9 requirements.

10 Second, simply carrying over discharge requirements ignores conditions that existed during
11 the prior period of the City's discharge. As the Petitioners highlighted, in May 2007, a large
12 number of salmon died just below the point of discharge for the City. Although the area is
13 considered hostile for fish, scientists have not determined the cause of the kill. The Regional Board
14 nonetheless determined the take of fish likely occurred at a time when the City was in compliance
15 with its prior discharge requirements. That fact casts legitimate doubts on the efficacy of the
16 discharge requirements of the prior order and warrants exacting scrutiny of each and every provision
17 of the prior order that were proposed for, and included in, this Order.

18 For the foregoing reasons, the Order should be vacated or remanded to the Regional Board
19 with instruction to craft discharge requirements that are supported by existing and emerging
20 scientific information, as well as stated conclusions by the Regional Board staff as to how the
21 discharge requirements will protect the beneficial uses of the receiving waters going forward.

22 **c. The Order Fails to Require More Stringent Monitoring and Testing.**

23 The State Water Board and Regional Board recognized in the Strategic Workplan the
24 importance of increased monitoring for contaminants. The Strategic Workplan provides:

25 The pelagic organism decline in the Delta and subsequent increased focus on
26 contaminants as a potential cause highlight the need for regularly compiling,
27 assessing, and reporting data that is currently being collected and the need to
better coordinate monitoring efforts.

28 (Strategic Workplan, p. 59.) More specifically, the State Water Board and Regional Board noted

1 that there "are a suite of contaminants and source categories that pose a concern for some Delta
2 beneficial uses and there is also concern for an emerging list of new contaminant categories
3 (pharmaceuticals and endocrine disrupters)." (Strategic Workplan, p. 25.) As called for in the
4 Strategic Workplan, Petitioners requested a more comprehensive monitoring plan to be included in
5 the Order.

6 For example, Petitioners cited recent investigations that claim to have discovered detectable
7 levels of pharmaceuticals in drinking water supplies across the country. ("Prescription Drugs Found
8 in Drinking Water Across U.S." Associated Press, March 10, 2008; "AP Enterprise: Drugs Affect
9 More Drinking Water," Associated Press, September 11, 2008; "AP Enterprise: Report Prompts
10 More Testing," Associated Press, September 11, 2008.) The investigations assert medication not
11 absorbed by its taker "passes through the [body] and is flushed down the toilet," and that even
12 though the wastewater is treated "most treatments do not remove all drug residue." Thus, according
13 to the investigations, prescription drugs can enter water supplies through municipal wastewater
14 discharges.

15 Whether the Order should include discharge requirements that specifically address
16 pharmaceuticals is presently unclear. However, emerging science indicates that "persistent
17 exposure to random combinations of low levels of pharmaceuticals . . . [indicate] alarming effects
18 on human cells and wildlife." ("Prescription Drugs Found in Drinking Water Across U.S."
19 Associated Press, March 10, 2008.) Therefore, Petitioners voiced concern that the monitoring and
20 reporting requirements of the Order should be increased. The Regional Board staff's response was
21 that the Order does impose rigorous monitoring requirements. However, rigorous monitoring
22 requirements and comprehensive monitoring requirements are not the same thing.

23 As discussed above, the Regional Board staff expressed hesitance in relying on emerging
24 scientific information. Although Petitioners recognize that there is uncertainty regarding specific
25 threats to Delta fish species, comprehensive information gathering will help prevent future
26 information gaps in the scientific information available about the Delta and its ecosystem (i.e., more
27 information about the Delta will invariably assist in the development of "defensible scientific
28 information" about it). Therefore, rejecting opportunities to require monitoring that could collect

1 sort of data is shortsighted. Petitioners recommended that the Regional Board impose heightened
2 monitoring requirements and – to ensure that the information is available to scientists and others
3 studying the Delta – require the City to post on its web site information about its monitoring and
4 testing as frequently as feasible (e.g., daily or weekly).

5 **5. THE MANNER IN WHICH PETITIONERS ARE AGGRIEVED**

6 The Authority, formed in 1992 as a joint powers authority, consists of 31 public agencies,
7 each of which contracts with the United States Department of the Interior, Bureau of Reclamation
8 (“Reclamation”), for water from the Central Valley Project (“CVP”). The Authority’s members
9 hold contracts with Reclamation for the delivery of approximately 3.3 million acre-feet of CVP
10 water annually. Reclamation conveys CVP water delivered to the Authority’s members through the
11 Sacramento-San Joaquin River Delta. Of the amount of water under contract, the Authority’s
12 members put to beneficial use, on average, approximately 2 million acre-feet of water on about 1.2
13 million acres of agricultural lands within the western San Joaquin Valley and parts of San Benito
14 and Santa Clara Counties, California; 200,000 acre-feet for municipal and industrial uses, including
15 those within the Silicon Valley; and approximately 300,000 acre-feet for environmental purposes,
16 including for waterfowl and wildlife habitat management in the San Joaquin Valley, California.

17 Westlands, a member of the Authority, is a California water district formed in 1952.
18 Westlands uses CVP water for irrigation of approximately 500,000 acres on the west side of the San
19 Joaquin Valley in Fresno and Kings Counties, as well as for municipal and industrial purposes
20 within those Counties. Westlands’ farmers produce more than 60 high quality commercial food and
21 fiber crops sold for the fresh, dry, canned, and frozen food markets, both domestic and export.
22 More than 50,000 people live and work in the communities that are dependent on Westlands’
23 agricultural economy. As such, the Authority and Westlands have a direct interest in discharges to
24 the Delta because of the impact they can have on the water supply of the Authorities member
25 agencies, including Westlands.

26 Two examples highlight this point. First, the State Water Board assigned to Reclamation
27 significant responsibility for water quality objectives established in the Bay-Delta Plan. As a result,
28 discharges into the Delta that fail to adequately protect beneficial uses of Delta water could require

1 Reclamation to increase releases from CVP reservoirs and/or reduce pumping at in-Delta CVP
2 facilities, to avoid a claim that Reclamation is not meeting its responsibilities. Either of those
3 actions would likely reduce the amount of water available to the Authority's members, including
4 Westlands. In addition, it is likely discharges from wastewater treatment facilities, including the
5 RWCF, adversely affect fish species dependant upon the Delta. Such effects may increase the level
6 of regulatory constraints imposed under the federal Endangered Species Act on Reclamation's CVP
7 operations. The added regulatory constraints on the CVP also could limit the amount of CVP water
8 made available to the Authority's member agencies, including Westlands.

9 Petitioners interests are therefore directly harmed by the failure of the Regional Board to
10 develop an effective and legally defensible program addressing discharges to waters of the state and
11 nation.

12 **6. THE SPECIFIC ACTION BY THE STATE OR REGIONAL BOARD WHICH**
13 **PETITIONER REQUESTS**

14 Petitioner seeks an Order by the State Water Board to vacate Order No. R5-2008-0154
15 (NPDES No. CA0079138) and remand it to the Regional Board with instructions to prepare and
16 circulate a new order that comports with regulatory requirements, as specified above.

17 **7. A STATEMENT OF POINTS AND AUTHORITIES IN SUPPORT OF**
18 **LEGAL ISSUES RAISED IN PETITION**

19 In California, the Porter-Cologne Water Quality Control Act ("Porter-Cologne Act") is
20 designed to protect the "quality of all the waters of the state . . . for use and enjoyment by the people
21 of the state." (Cal. Water Code § 13000.) To that end, the Porter-Cologne Act requires the
22 regulation of all "activities and factors which may affect the quality of the waters of the state . . . to
23 attain the highest water quality which is reasonable." (*Ibid.*) Sections 13146 and 13247 of the
24 California Water Code require that the Regional Board, in carrying out activities that affect water
25 quality, comply with all policies for water quality control and with applicable water quality control
26 plans approved or adopted by the State Water Board.

27 Furthermore, the Clean Water Act is designed to restore and maintain the "chemical,
28 physical, and biological integrity of the Nation's waters." (33 U.S.C. § 1251.) To that end, the

1 Clean Water Act makes it unlawful to discharge pollutants from a point source into the waters of the
2 United States unless done in compliance with the terms of a valid discharge permit. (33 U.S.C. §
3 1311(a).) Under the Clean Water Act, pollutants include:

4 [D]redged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge,
5 munitions, chemical wastes, biological materials, radioactive materials, heat,
6 wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and
agricultural waste discharged into water.

7 (33 U.S.C. § 1362(6).) Section 402 of the Clean Water Act establishes the NPDES under which the
8 Environmental Protection Agency or an authorized state may issue permits that grant a permittee the
9 right to discharge specified pollutants from specified outfalls for a period of time. (33 U.S.C. §
10 1342.) California is a state authorized to administer NPDES permits and does so through the State
11 Water Board and Regional Water Quality Control Boards. (Cal. Water Code § 13370 et seq.)

12 The Regional Board therefore has a duty to conform its actions to the Bay-Delta Plan and the
13 Basin Plan, particularly when issuing discharge requirements like those in this Order, as well as
14 federal requirements under the Clean Water Act. The Regional Board further has a duty, in carrying
15 out its responsibilities, to address new developments, in terms of both scientific knowledge and the
16 declining "health" of Delta waterways.

17 Petitioners believe that an evidentiary hearing before the State Water Board will not be
18 necessary to resolve the issues raised in this petition. However, Petitioners welcome the
19 opportunity to present oral argument and respond to any questions the State Water Board may have
20 regarding this petition.

21 **8. A STATEMENT THAT THE PETITION HAS BEEN SENT TO THE**
22 **APPROPRIATE REGIONAL BOARD AND THE DISCHARGERS, IF NOT**
23 **THE PETITIONER**

24 A true and correct copy of this petition, with attachments, was sent electronically and by first
25 class mail to Pamela Creedon, Executive Officer, Regional Water Quality Control Board, Central
26 Valley region, 11020 Sun Center Drive, Rancho Cordova, CA 95670-6114.

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1 A true and correct copy of this petition, with attachments, was sent by first class mail to the
2 Discharger, Mark Madison, Director of Municipal Utilities, City of Stockton, 2500 Navy Drive
3 Stockton, CA 95206.

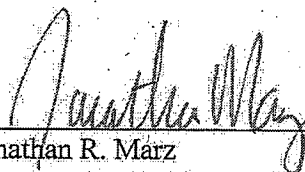
4 A true and correct copy of this petition, with attachments, was sent electronically and by first
5 class mail to Theresa A. Dunham, Somach, Simmons, and Dunn, attorneys for City of Stockton, 813
6 Sixth Street, Third Floor, Sacramento, CA 95814.

7 **9. A STATEMENT THAT THE ISSUES RAISED IN THE PETITION WERE**
8 **PRESENTED TO THE REGIONAL BOARD BEFORE THE REGIONAL**
9 **BOARD ACTED, OR AN EXPLANATION OF WHY THE PETITIONER**
10 **COULD NOT RAISE THOSE OBJECTIONS BEFORE THE REGIONAL**
11 **BOARD**

12 Petitioners presented the issues addressed in this petition to the Regional Board in detailed
13 comments submitted to the Regional Board on September 22, 2008, through cross-examination of
14 witnesses, and through oral comments at the October 23, 2008, hearing, during which the Regional
15 Board issued the Order.

16 Dated: November 24, 2008

Respectfully submitted,

17 

18 Jonathan R. Marz
19 Attorneys for Petitioners, San Luis & Delta-Mendota
20 Water Authority and Westlands Water District
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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD**CENTRAL VALLEY REGION**

11020 Sun Center Drive #200, Rancho Cordova, California 95670-6114
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<http://www.waterboards.ca.gov/centralvalley>

ORDER NO. R5-2008-0154**NPDES NO. CA0079138**

**WASTE DISCHARGE REQUIREMENTS FOR THE
CITY OF STOCKTON
REGIONAL WASTEWATER CONTROL FACILITY
SAN JOAQUIN COUNTY**

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 1. Discharger Information

Discharger	City of Stockton
Name of Facility	Regional Wastewater Control Facility
Facility Address	2500 Navy Drive
	Stockton, CA 95206
	San Joaquin
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a major discharge.	

The discharge by the City of Stockton Regional Wastewater Control Facility from the discharge points identified below is subject to waste discharge requirements as set forth in this Order:

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Tertiary treated municipal wastewater	37° 56' 15" N	121° 20' 5" W	San Joaquin River

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	23 October 2008
This Order shall become effective on:	12 December 2008
This Order shall expire on:	1 October 2013
The Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than:	<u>180 days prior to the Order expiration date</u>

I, PAMELA C. CREEDON, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on **23 October 2008**.

Original signed by Pamela C. Creedon

PAMELA C. CREEDON, Executive Officer

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I. FACILITY INFORMATION

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 4. Facility Information

Discharger	City of Stockton
Name of Facility	Regional Wastewater Control Facility
Facility Address	2500 Navy Drive
	Stockton, CA 95206
	San Joaquin County
Facility Contact, Title, and Phone	Mark Madison, Director, (209) 937-8750
Mailing Address	SAME
Type of Facility	Publicly Owned Treatment Works
Facility Design Flow	55 million gallons per day (mgd)

II. FINDINGS

The California Regional Water Quality Control Board, Central Valley Region (hereinafter Regional Water Board), finds:

A. Background. The City of Stockton (hereinafter Discharger) is currently discharging pursuant to Order No. R5-2002-0083 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0079138. The Discharger submitted a Report of Waste Discharge, dated 29 September 2006, and applied for a NPDES permit renewal to discharge up to 55 million gallons per day (mgd) of treated wastewater from the City of Stockton Regional Wastewater Control Facility, hereinafter Facility. The application was deemed complete on 28 February 2007.

For the purposes of this Order, references to the "discharger" or "permittee" in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

B. Facility Description. The Discharger owns and operates the Stockton Regional Wastewater Control Facility. The Facility provides primary treatment consisting of screening, grit removal, and primary sedimentation, and secondary treatment consisting of high rate trickling filters and secondary clarifiers. The secondary treated effluent is piped under the San Joaquin River to the tertiary level treatment facility, which consists of facultative ponds, engineered wetlands, two nitrifying biotowers, dissolved air flotation, mixed-media filters, and chlorination/dechlorination facilities. Several of the ponds are operated in a stand-by mode of operation as necessary, to achieve improved effluent quality by decreasing solids loading on the downstream treatment process, and by maintaining stable ammonia loading to the nitrifying biotowers.

Sludge is removed from the primary and secondary sedimentation processes to gravity thickeners for preliminary water removal, and then pumped to anaerobic digesters. After digestion, the treated sludge is pumped to a lagoon where anaerobic digestion continues. A dredge is used to pump the concentrated material from the bottom of the lagoon to a belt filter press and dewatered biosolids are removed by a private contractor off-site for agricultural reuse.

Wastewater is discharged from Discharge Point No. 001 (see table on cover page) to the San Joaquin River, a water of the United States, within the Sacramento-San Joaquin Delta. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

- C. Legal Authorities.** This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (CWC) (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).
- D. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E, G, and H are also incorporated into this Order.
- E. California Environmental Quality Act (CEQA).** Under CWC section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100-21177.
- F. Technology-based Effluent Limitations.** Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations (CFR)¹ require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards at Part 133. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).
- G. Water Quality-based Effluent Limitations.** Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. This Order contains requirements, expressed as a technology equivalence requirement that are necessary to achieve water quality standards. The Regional Water

¹ All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

Board has considered the factors listed in CWC Section 13241 in establishing these requirements. The rationale for these requirements, which consist of tertiary treatment or equivalent requirements, is discussed in the Fact Sheet.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the State's narrative criterion, supplemented with other relevant information, as provided in 40 CFR section 122.44(d)(1)(vi).

H. Water Quality Control Plans. The Regional Water Board adopted a *Water Quality Control Plan, Fourth Edition (Revised February 2007), for the Sacramento and San Joaquin River Basins* (hereinafter Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to San Joaquin River are as follows:

Table 5. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	San Joaquin River	<p><u>Existing:</u></p> <p>Municipal and domestic supply (MUN); agricultural supply (AGR) including both irrigation and stock watering; industrial process supply (PRO); industrial service supply (IND); water contact recreation (REC-1); non-contact water recreation (REC-2); migration of aquatic organisms (MIGR); warm freshwater aquatic habitat (WARM); cold freshwater aquatic habitat (COLD); spawning, reproduction, and/or early development (SPWN); wildlife habitat (WILD); and navigation (NAV).</p>

The Basin Plan includes a list of Water Quality Limited Segments (WQLSs), which are defined as "...those sections of lakes, streams, rivers or other fresh water bodies where water quality does not meet (or is not expected to meet) water quality standards even after the application of appropriate limitations for point sources (40 CFR 130, et seq.)." The Basin Plan also states, "Additional treatment beyond minimum federal standards will be imposed on dischargers to WQLSs. Dischargers will be assigned or allocated a maximum allowable load of critical pollutants so that water quality objectives can be met in the segment." The Delta is divided into multiple WQLSs. The Facility discharges directly into the southern portion and just upstream of the Stockton Deep Water Ship

Channel (DWSC). The listing for both WQLSs are applicable to the discharge. The WQLSs are 303(d) listed for: chlorpyrifos, DDT, diazinon, dioxin, EC, exotic species, furan compounds, group A pesticides, mercury, pathogens, PCBs, and unknown toxicity. Effluent Limitations for EC, mercury, pathogens, and toxicity are included in this Order.

A total maximum daily load (TMDL) for oxygen demanding substances in the DWSC was adopted by the Regional Water Board on 27 January 2005 (Resolution No. R5-2005-0005). The TMDL was approved by the State Water Board on 16 November 2005 and approved by the USEPA on 27 February 2007. Wasteload allocations for oxygen demanding substances, specifically ammonia, carbonaceous biochemical oxygen demand (CBOD₅), and dissolved oxygen (DO), have not been apportioned; however, this Order contains effluent limits for these constituents until the Regional Water Board establishes final effluent limitations.

Requirements of this Order implement the Basin Plan.

- I. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on 22 December 1992, and later amended it on 4 May 1995 and 9 November 1999. About forty criteria in the NTR applied in California. On 18 May 2000 USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on 13 February 2001. These rules contain water quality criteria for priority pollutants.
- J. **State Implementation Policy.** On 2 March 2000 the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on 28 April 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on 18 May 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on 24 February 2005 that became effective on 13 July 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.
- K. **Compliance Schedules and Interim Requirements.** In general, an NPDES permit must include final effluent limitations that are consistent with CWA section 301 and with 40 CFR 122.44(d). There are exceptions to this general rule. The State Water Board has concluded that where the Regional Water Board's Basin Plan allows for schedules of compliance and the Regional Water Board is newly interpreting a narrative standard, it may include schedules of compliance in the permit to meet effluent limits that implement a narrative standard. See *In the Matter of Waste Discharge Requirements for Avon Refinery* (State Water Board Order WQ 2001-06 at pp. 53-55). See also *Communities for a Better Environment et al. v. State Water Resources Control Board*, 34 Cal.Rptr.3d 396, 410 (2005). The Basin Plan for the Sacramento and San Joaquin Rivers includes a provision that authorizes the use of compliance schedules in NPDES

permits for water quality objectives that are adopted after the date of adoption of the Basin Plan, which was 25 September 1995 (see Basin Plan at page IV-16). Consistent with the State Water Board's Order in the CBE matter, the Regional Water Board has the discretion to include compliance schedules in NPDES permits when it is including an effluent limitation that is a "new interpretation" of a narrative water quality objective. This conclusion is also consistent with the USEPA policies and administrative decisions.

See, e.g., Whole Effluent Toxicity (WET) Control Policy. The Regional Water Board, however, is not required to include a schedule of compliance, but may issue a Time Schedule Order pursuant to Water Code section 13300 or a Cease and Desist Order pursuant to Water Code section 13301 where it finds that the discharger is violating or threatening to violate the permit. The Regional Water Board will consider the merits of each case in determining whether it is appropriate to include a compliance schedule in a permit, and, consistent with the Basin Plan, should consider feasibility of achieving compliance, and must impose a schedule that is as short as practicable to achieve compliance with the objectives, criteria, or effluent limit based on the objective or criteria.

For CTR constituents, Section 2.1 of the SIP provides that, based on a discharger's request and demonstration that it is infeasible for an existing discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception has been granted under section 5.3 of the SIP, a compliance schedule may not exceed 5 years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or 18 May 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds 1 year, the Order must include interim numeric limitations for that constituent or parameter. Where allowed by the Basin Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised water quality objective. This Order does not include compliance schedules and interim effluent limitations and/or discharge specifications. A detailed discussion is included in the Fact Sheet.

L. Alaska Rule. On 30 March 2000 USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. (40 CFR §131.21; 65 Fed. Reg. 24641 (27 April 2000).) Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after 30 May 2000 must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by 30 May 2000 may be used for CWA purposes, whether or not approved by USEPA.

M. Stringency of Requirements for Individual Pollutants. This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The applicable technology-based effluent limitations consist of restrictions on CBOD₅ and total suspended solids (TSS). The applicable water quality-based effluent limitations consist of restrictions on aluminum, ammonia, bis(2-ethylhexyl)phthalate, chlorodibromomethane, cyanide, dichlorobromomethane, manganese, molybdenum, nitrate, and pathogens. This Order's technology-based pollutant restrictions implement

the minimum, applicable federal technology-based requirements. In addition, this Order includes effluent limitations for CBOD₅, TSS, and pathogens to meet numeric objectives or protect beneficial uses. The rationale for including these limitations is explained in the Fact Sheet (Attachment F). In addition, the Regional Water Board has considered the factors in Water Code section 13241 in establishing these requirements.

Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to 40 CFR section 131.38. The scientific procedures for calculating the individual water quality-based effluent limitations are based on the CTR-SIP, which was approved by USEPA on 1 May 2001. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to 30 May 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to 30 May 2000, but not approved by USEPA before that date, are nonetheless "*applicable water quality standards for purposes of the [Clean Water] Act*" pursuant to 40 CFR section 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the technology-based requirements of the CWA and the applicable water quality standards for purposes of the CWA.

- N. Antidegradation Policy.** Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 is consistent with the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in detail in the Fact Sheet (Attachment F) the permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.
- O. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. Some effluent limitations in this Order are less stringent than those in the previous Order. As discussed in detail in the Fact Sheet (Attachment F) this relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.
- P. Endangered Species Act.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act

(16 U.S.C.A. sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

- Q. Monitoring and Reporting.** Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and state requirements. This Monitoring and Reporting Program is provided in Attachment E.
- R. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.
- The Regional Water Board has determined pollution prevention is necessary to achieve compliance with water quality objectives for total dissolved solids (for salinity), and mercury. In accordance with Water Code section 13263.3(d)(C), this Order requires the Discharger to develop pollution prevention plans for these pollutants.
- S. Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections IV.C., V.B, and VI.C.4.a. of this Order are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.
- T. Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.
- U. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Order.

THEREFORE, IT IS HEREBY ORDERED, that Waste Discharge Requirements Order No. R5-2002-0083 and Cease and Desist Order No. R5-2002-0084 are rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the CWC (commencing with section 13000) and regulations adopted thereunder; and the provisions of the federal CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

III. DISCHARGE PROHIBITIONS

- A. Discharge of wastewater at a location or in a manner different from that described in the Findings is prohibited.
- B. The by-pass or overflow of wastes to surface waters is prohibited, except as allowed by Federal Standard Provisions I.G. and I.H. (Attachment D).
- C. Neither the discharge nor its treatment shall create a nuisance as defined in Section 13050 of the California Water Code.
- D. The Discharger shall not allow pollutant-free wastewater to be discharged into the collection, treatment, and disposal system in amounts that significantly diminish the system's capability to comply with this Order. Pollutant-free wastewater means rainfall, groundwater, cooling waters, and condensates that are essentially free of pollutants.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point No. 001

1. Final Effluent Limitations – Discharge Point No. 001

The Discharger shall maintain compliance with the following effluent limitations at Discharge Point No. 001, with compliance measured at Monitoring Location EFF-001 as described in the attached MRP (Attachment E):

- a. The Discharger shall maintain compliance with the effluent limitations specified in Table 6:

Table 6. Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Aluminum, Total Recoverable	µg/L	311		750		
Ammonia, Total (as N)	mg/L	2	--	5	--	--
	lbs/day ¹	917	--	2294	--	--
Bis(2-ethylhexyl)phthalate	µg/L	1.8	--	3.6	--	--